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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,744	05/20/2005	David McCartney	1056-001	9642

7590 10/09/2007  
Roberts Abokhair & Mardula  
Suite 1000  
11800 Sunrise Valley Drive  
Reston, VA 20191

EXAMINER
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WEBB, GREGORY E

ART UNIT	PAPER NUMBER
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1796

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10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/535,744

Applicant(s)

MCCARTNEY, DAVID

Examiner

Gregory E. Webb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 1, 3, 4, 7, 10, and 15-16 are objected to because of the following informalities:
2. Claims 1, 10 and 15-16 is directed to a "solvent." However these claims are not directed to a solvent but instead directed to a "solvent composition." A solvent is a single compound. A solvent composition is a mixture of solvent. **S**.
3. Claims 3 and 16 recite the alkanolamide is triethanolamide. The examiner is unclear about this limitation. An alkanolamide is formed by reacting a fatty acid with a compound such as triethanolamine. This will form a fatty acid alkanolamide such as coconut fatty acid triethanolamide which are commonly used as foam stabilizers. In the instant claim it is not clear if the applicant is claiming a class of triethanolamide surfactants or triethanolamide itself. It appears the applicant is claiming only the triethanolamide. However triethanolamide does not exist without the acid group. It is also possible the applicant has confused triethanolamine with the term "triethanolamide." Triethanolamine is a well known alkali that is non-caustic and seems to be the term intended. Please either correct this claim or provide a CAS registry number for the triethanolamide.
4. Claim 4 recites the term "trinitriloacetic acid." It is believed that this compound has been misnamed as acetic acid cannot bond with three nitrilo groups. It is most likely this was a typographical error for the actual compound "nitrilotriacetic acid." Nitrilotriacetic acid has the CAS-Number 139-13-9. Should the examiner be wrong,

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please provide the CAS-number for the claimed compound. Appropriate correction is required.

5. In claim 7 the applicant states that d-limonene is a subset of the chemical group "terpenols." However, this is not the case. Terpenols are a group of terpene based alcohols having at least one hydroxyl functionality. Limonene on the other hand is a terpene and not a terpenol as it does not have any oxygen or hydroxyl groups.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. It is unclear to the examiner what is actually being claimed. The examiner sees no clear limitation defining the solvent. It is not clear what formula is being referenced nor is the examiner clear as what are considered "permitted substitutions."

9. This claim is an omnibus type claim.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Silvester et al (US 6,150,318).

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3. Silvester teaches aerosol cleaning compositions containing water. In the abstract Silvester teaches the composition to contain surfactants; organic compounds; coupling agents and water.
4. In column 3, Silvester teaches the use of multiple surfactants including nonionic and amphoteric surfactants. In particular the nonionic surfactant can be an alkanolamide, and fatty alcohol ethoxylates. Concerning the amphoteric surfactants, in column 4, Silvester teaches the use of betaines.
5. Concerning the terpene, Silvester teaches various insoluble solvents suitable for their invention including terpenes such as limonene.
6. Silvester teaches coupling solvents in column 5 including the applicant's claimed 1-methoxy-2-propanol (aka propylene glycol monomethyl ether; see lines 30-35).
7. Silvester further teaches chelating agents and colorants. Specifically Silvester teaches the inclusion of the claimed nitrilotriacetic acid (see col. 6, lines 1-10).
8. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by DeLeo et al (US 7,202,200).

Concerning the alkanolamide, the nonionic surfactants and the fatty acid ethoxylate, DeLeo teaches the following:

Illustrative nonionic surfactants are the semi-polar nonionics known as amine oxides, and other nonionics, such as, ethylene oxide and mixed ethylene oxide/propylene oxide adducts of alkylphenols, ethoxylated, propoxylated and **ethoxylated/propoxylated alcohols, the ethylene oxide and mixed ethylene oxide/propylene oxide adducts of long chain alcohols or of fatty acids**, mixed ethylene oxide/propylene oxide block copolymers, esters of fatty acids and hydrophilic alcohols, such as sorbitan monooleate, **alkanolamides**, alkylpolyglycosides and alkylpolyglucosides, alkylpyrrolidones (which may also be considered solvents (see 6. below) and the like. (*emphasis added*)

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Concerning the chelating agent, trinitriloacetic (sp?) acid and the non-caustic alkali, DeLeo teaches the following:

The chelating agent is also an important part of the invention. Chelants useful herein include the various alkali metal, ammonium and substituted ammonium polyacetates, carboxylates, polycarboxylates and polyhydroxysulfonates. Most preferred is citric acid. Non-limiting examples of polyacetate and polycarboxylate builders include the sodium, potassium, lithium, ammonium and substituted ammonium salts of ethylenediamine tetraacetic acid, ethylenediamine triacetic acid, ethylenediamine tetrapropionic acid, diethylenetriamine pentaacetic acid, **nitritotriacetic acid**, oxydisuccinic acid, iminodisuccinic acid, mellitic acid, polyacrylic acid or polymethacrylic acid and copolymers, benzene polycarboxylic acids, gluconic acid, sulfamic acid, oxalic acid, phosphoric acid, phosphonic acid, organic phosphonic acids, acetic acid, and citric acid. Stronger inorganic acids, such as hydrochloric, sulfuric, sulfonic, hydroxysulfamic, may also be suitable. In general, if a toilet cleaning product is desired, it will usually be acidic since these types of products are most effective against the types of mineral stains commonly found on such surfaces. Chelating agents may also exist either partially or totally in the hydrogen ion form, for example, citric acid or disodium dihydrogen ethylenediamine tetraacetate. The substituted ammonium salts include those from methylamine, dimethylamine, butylamine, butylenediamine, propylamine, triethylamine, trimethylamine, monoethanolamine, diethanolamine, **triethanolamine**, isopropanolamine, and propanolamine. (*emphasis added*)

Concerning the amphoteric surfactant and the betaine, DeLeo teaches the following:

It may be suitable to employ **amphoteric surfactants** in the invention. An amphoteric is typically an **alkylbetaine**, an amidobetaine, or a sulfobetaine. One group of preferred amphoteric are alkylamidoalkyl-dialkylbetaines. These have the structure: (*emphasis added*)

Concerning the terpenol and the Limonene, DeLeo teaches the following:

Additional water insoluble solvents may be included in minor amounts (0 1%). These include isoparafinic hydrocarbons, mineral spirits, alkylaromatics, and terpenes such as **d-limonene** and pine oil (many of the **terpene** derivatives and pine oil are quite aromatic and can further be used as fragrances. In addition, they also appear to act as antimicrobials). Additional water soluble solvents may be included in minor amounts (0 2%). These include pyrrolidones, such as N-methyl-2-pyrrolidone, N-octyl-2-pyrrolidone and N-dodecyl-2-pyrrolidone. (*emphasis added*)

Concerning the glycol ether and the 1-methoxy-2-propanol, DeLeo teaches the following:

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Straight or branched chain alkanol can be used in the invention. These are methanol, ethanol, n-propanol, isopropanol, and the various positional isomers of butanol, pentanol, and hexanol. One can also use a mixture of an alkanol with a glycol ether, in which the ratio of the two components is about 100:1 to 1:10. One can also use an alkylene glycol ether solvent in this invention. The alkylene glycol ether solvents can be used alone or in addition to the polar alkanol solvent. These can include, for example, monoalkylene glycol ethers such as ethylene glycol monopropyl ether, ethylene glycol mono-n-butyl ether, propylene glycol monopropyl ether, and propylene glycol mono-n-butyl ether, and polyalkylene glycol ethers such as diethylene glycol monoethyl or monopropyl or monobutyl ether, di- or tri-polypropylene glycol monomethyl or monoethyl or monopropyl or monobutyl ether, etc., and mixtures thereof. Additionally, acetate and propionate esters of glycol ethers can be used. Preferred glycol ethers are diethylene glycol monobutyl ether, also known as 2-(2-butoxyethoxy) ethanol, sold as Butyl Carbitol by Union Carbide, ethylene glycol monobutyl ether, also known as butoxyethanol, sold as Butyl Cellosolve also by Union Carbide, and also sold by Dow Chemical Co., propylene glycol monopropyl ether, available from a variety of sources, and **propylene glycol methyl ether**, sold by Dow as **Dowanol PM**. Another preferred alkylene **glycol ether** is propylene glycol t-butyl ether, which is commercially sold as Arcosolve PTB, by Arco Chemical Co. Dipropylene glycol n-butyl ether ("DPNB") is also preferred. (*emphasis added*)

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglass McGinty can be reached on (571)272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'G. Webb', with a date '9/21/07' written below it.

Gregory E. Webb  
Primary Examiner  
Art Unit 1751

gew